

APPLICANT INFORMATION

Instee Kelly Brown

Application for Architectural Review Board

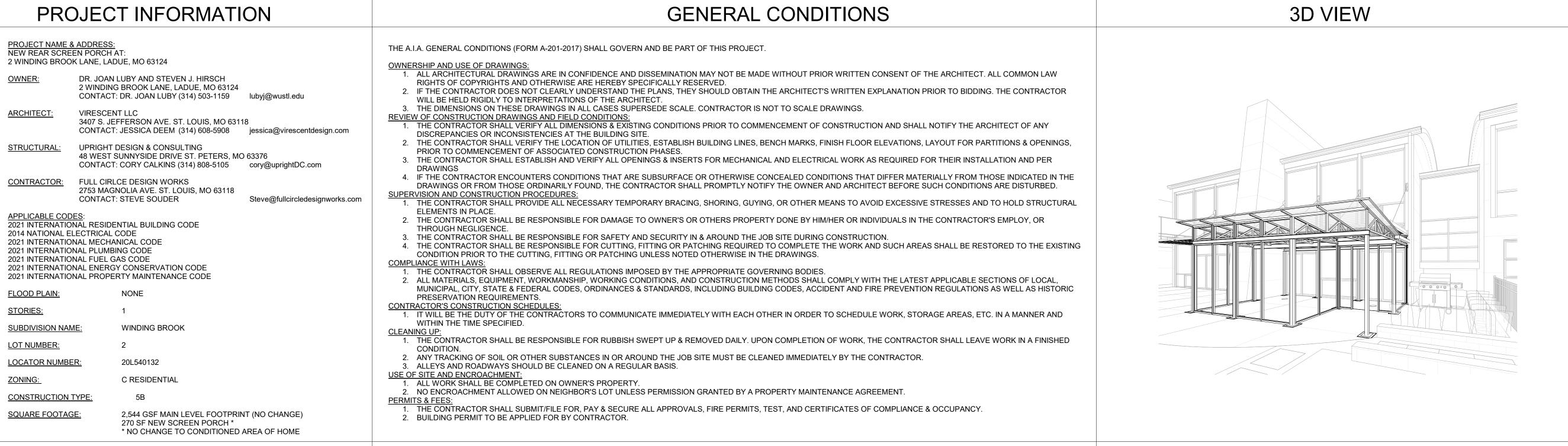
* This application must be filled out completely and signed before submittals are placed on the ARB agenda.

The purpose of Architectural Review Board shall be to two-fold; to develop architectural and design guidelines for the City of Ladue in accordance with section 110-70 and to apply those guidelines in reviewing projects within the City as to whether or not the project adheres to such guidelines.

| Name of Applicant: | DR. JOAN LUBY AND STEVEN J. HIRSCH |
|---|--|
| Phone #: | (314) 503-1159 |
| Email address of Applica | nt (for review comments):lubyj@wustl.edu |
| PROJECT PROPERTY INFORMATION | |
| Address for proposed work: 2 WINDING BROOK LANE, LADUE, MO 63124 | |
| If this ARB application is | amending a project that is currently under construction, list permit #: |
| | IDENTIAL Parcel ID # (St. Louis county tax record): 20L540132 |
| DESCRIPTION OF PROPO | SED PROJECT: New one-story screen porch at lower level of rear facade to be located below an existing awning and atop an existing concrete patio. |
| | There will be no change to the hardscape/greenspace coverage. |
| Plans for project and existing decl of the Architectu Revised plans w application to th Projects approve become void. | aled plans are not required for ARB review. Is involving alterations and repairs, which do not affect the outward appearance of a building, as, fences, window replacements and roofing shingle replacements shall not require approval ral Review Board. It any changes predicated by the ARB will need to be submitted with the building permit Department of Planning and Development with final trustee approval (if applicable.) It does not be submitted for building permits within 180 days or the ARB approval may |
| By signing this application be added to the meeting | on, you acknowledge that by submitting an incomplete application, your petition will not gagenda. |
| XXX | Date: 4/12/12 The proposed of the purposes of |

other authorization by the City that may be required for you to fully complete your proposed project.

EXTERIOR ALTERATIONS



SHEET INDEX

SHEET NO. SHEET NAME

COVER SHEET SYMBOLS AND ABBREVIATIONS A001 **SPECIFICATIONS** A002

ARCHITECTURAL

FLOOR PLANS

EXTERIOR ELEVATIONS & SECTIONS

GENERAL NOTES

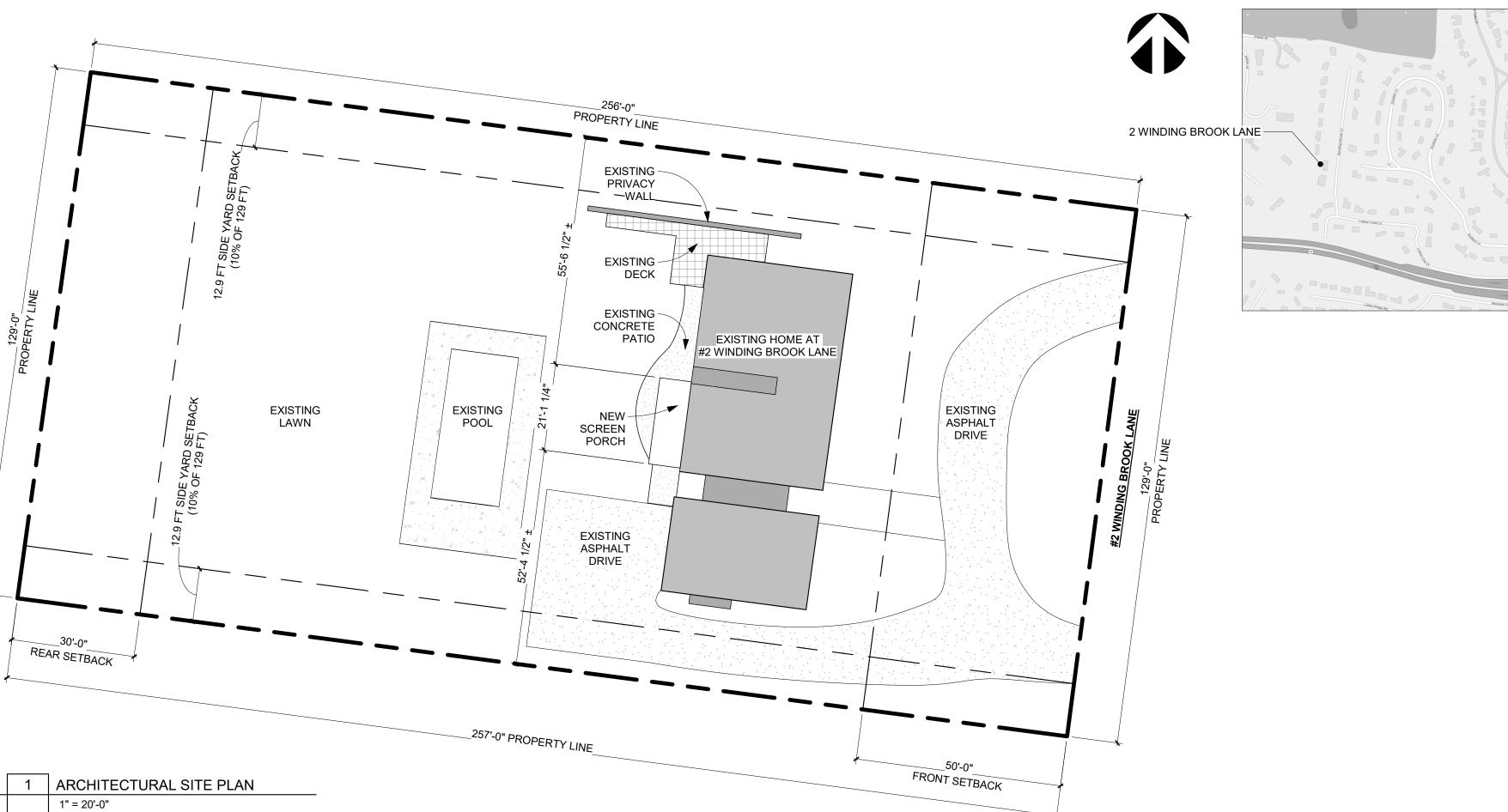
GENERAL ELECTRICAL NOTES:

- . ELECTRICAL WORK SHALL BE DESIGNED AND BUILT BY D/B CONTRACTOR, WHO SHALL ARRANGE FOR AND OBTAIN INSPECTIONS AND SIGN-OFFS REQUIRED BY THE MUNICIPAL AUTHORITY HAVING JURISDICTION.
- ALL ELECTRICAL EQUIPMENT AND WIRING RELATING TO WORK DONE IN ANY WORK AREA SHALL COMPLY WITH 2014 NATIONAL ELECTRICAL CODE.
- THE FOLLOWING NOTES ARE A SUMMARY OF CODE MINIMUMS. REFER TO CURRENT CODE FOR MORE COMPLETE INFORMATION. REFER TO DRAWINGS FOR ADDITIONAL OUTLETS AND FIXTURES. A. NOT LESS THAN 90% OF PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL
- CONTAIN ONLY HIGH-EFFICACY LAMPS (CFL OR LED). B. PROVIDE MINIMUM (1) EXTERIOR RATED LIGHT FIXTURE ON THE EXTERIOR
- FACADE ADJACENT TO EACH EXTERIOR DOOR.
- . LIGHTING FIXTURES SHALL BE FURNISHED AND INSTALLED BY THE G.C. U.N.O. LIGHTING/ELECTRICAL LAYOUT SHOWN IS SUGGESTED ONLY.
- FINAL LIGHTING/ELECTRICAL LAYOUT, FIXTURE AND LIGHTING CONTROL SELECTION TO BE APPROVED AND COORDINATE WITH OWNER AND ARCHITECT, PRIOR TO INSTALLATION.

GENERAL PLAN & ELEVATION NOTES:

- A. ALL FINISHES AND HARDWARE SELECTIONS TO BE APPROVED BY OWNER & ARCHITECT. B. DIMENSIONS TO EXISTING WALLS ARE MEASURED TO FACE OF FINISH
- C. DIMENSIONS TO NEW CONSTRUCTION ARE MEASURED TO FACE OF STRUCTURE D. STEEL STRUCTURE TO BE POWDER COATED WITH BLACK FINISH TO MATCH EXISTING STEEL LOUVER FRAME.
- E. SCREEN PANELS TO HAVE PRE-FINISHED BLACK ALUMINUM FRAMES; 'PHIFER BETTERVUE' SCREEN OR APPROVED ALTERNATE a. ALUMINUM FRAMES, ALUMINUM MULLIONS AND SCREENS TO BE SOURCED FROM
- BROADVIEW SCREEN OR APPROVED ALTERNATE
- BE SOURCED FROM POLYCARBONATE MANUFACTURER a. <u>ALUMINUM</u> CONNECTORS AND U-SHAPED EDGE PROFILES ARE PREFFERRED OVER POLYCARBONATE; FINAL SELECTION TO BE APPROVED BY OWNER & ARCHITECT

SITE PLAN





CONSULTANTS:

cory@uprightdc.com

JPRIGHT DESIGN AND CONSULTING 48 WEST SUNNY SIDE DRIVE ST. PETERS, MO 63376 314-378-9731

Jessica G. Deem MO# 2017040537 **REVISIONS:**

Description

4/7/2022

ISSUE DATE:

COVER SHEET

1" ACTUAL ACTUAL SHEET SIZE: 24" X 36"

POLYCARBONATE ROOF SYSTEM COMPONENTS, FASTENERS AND CONNECTORS SHALL

LOCATION MAP

1" ACTUAL ACTUAL SHEET SIZE: 24" X 36"

- job site conditions. All work shall be done in accordance with all applicable local, state and federal codes. B. The contractor shall verify all dimensions and site conditions prior to starting any construction and shall
- notify the architect of any errors or inconsistencies before proceeding with the work. C. Changes to this work are only authorized if in writing from the architect.
- D. The dimensions on these drawings supercede scale. Contractor is not to scale the drawings.
- The contractor shall verify the location of utilities prior to construction. F. All architectural drawings are in confidence and dissemination may not be made without prior written consent of the architect. All common law rights of copyrights and otherwise are hereby specifically
- G. If the contractor does not understand the plans, he should obtain the architect's written explanation prior to bidding. The contractor shall be held rigidly to interpretations of the architect.

Subsurface Exploration:

- A. A geotechnical engineering investigation of the site has not been made.
- B. Soil conditions are to be assumed stable for a standard excavation for the new work.
- C. General Contractor to assess site conditions at time of excavation(s) and report substandard conditions or high water table or standing water conditions to the Owner and architect.

Lead Abatement:

- A. Provide all work and services in accordance with the OSHA "Lead Exposure in Construction" regulation, and all other local, state, federal regulations, statutes, ordinances, and guidelines in such form in which they exist at the time of the work on the contract and as may be required by subsequent revisions. While the following is not meant to be construed as, nor shall the Contractor shall consider it to be, an all-inclusive list, this project is at least subject to compliance with the most current issue of the following regulations and publications: which are applicable to work with or the abatement of lead hazards and lead based paint: OSHA, EPA, DOT, ANSI, NIOSH, and HUD.
- B. The abatement or interim control of lead hazards, lead containing materials, lead-based paint and/or soil and exterior dust abatement includes, but is not limited to the following:
- a. Initial cleaning and preparation of the abatement areas (e.g. work area set-up).
- b. The abatement and/or interim control of lead-based paint and/or lead hazards (whether finish coat, intermediate coat, or prime coat paints or any paint or surface coating), any lead containing materials, and/or soil or exterior dust includes areas indicated in other sections of the specifications, on the
- c. Obtain proper approval and legally dispose of all lead contaminated materials identified as hazardous or non-hazardous, based on results of hazardous waste characterization testing (e.g., Toxicity Characteristic Leaching Procedure [TCLP] tests or other hazardous waste characterization analyses as
- d. Provide documentation required for completion and closeout items.
- e. Provide properly trained workers in accordance with the Lead Licensing and Accreditation program (Kansas Department of Health & Environment - KDHE) and other requirements of this specification. f. Maintain records so as to comply with all applicable portions of OSHA and EPA requirements.

03 - Concrete:

- A. Minimum compressive strength at 28 days for concrete shall be:
- 2500 PSI basement slabs.

drawings (if provided), and in A. of this section.

- 2. 3000 PSI foundation walls, footings and piers. 3. 3500 PSI – porches, walks, patios, steps, driveways, and garage/carport slabs.
- B. Slump shall be 3" maximum for walls, footings and 4" maximum for slabs on grade. No water is to be added either in transit or at time of depositing in place. Provide air entrainment in all work exposed to
- C. Comply with ACI bulletin 306 for cold weather placement. ACI bulletin 305R for hot weather placement.
- D. Perform work in accordance with ACI 301 & ACI 318. Concrete shall not be placed until: 1. The formwork has been completed, adjusted into final position, cleaned of all debris, snow, and ice,
- and coated with a form release agent. 2. All reinforcement, expansion joint material, waterstops, and other embedded items have been placed
- and secured to prevent displacement during concrete placement.
- 3. All concrete construction joints have been properly prepared. All standing water has been removed.
- E. Concrete shall be placed in a manner which prevents segregation and as quickly as practicable so that the concrete already placed is still plastic. Concrete shall be consolidated so that it is thoroughly worked around the reinforcement, embedded items, and into the corners of the forms. Concrete shall be protected from premature drying by the application of continuous mist spray, absorptive mats kept continuously wet, and moisture retaining coverings, etc. for a period of 7 days.
- F. Reinforcement shall satisfy the following: 1. Reinforcing Bars: All reinforcing bars shall be deformed and shall satisfy the requirements of ASTM
- A615-87A Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete
- 2. Welded Wire Fabric: All welded wire fabric shall be smooth and shall satisfy the requirements of ASTM A185-85A Standard Specification for Steel Welded Wire Fabric, Plain, for Concrete Reinforcement G. All reinforcement shall be bent cold. At the time of placement all reinforcement shall be free of dirt, mud. oil, or any other substance that may reduce the concrete bond. Minor dust and mill scale need not be
- H. All reinforcement shall be placed to provide the following minimum concrete cover:
- 1. Concrete cast against earth 3 inches 2. Concrete exposed to earth or weather
- a. #6 through #18 bar 2 inches b. #5 bar and W31 wire and smaller - 1½ inches
- 3. Concrete not exposed to earth or weather
- a. Slabs, walls, joist ¾ inch b. Beams, columns – 1½ inches
- Concrete Slabs (typical construction):
- 1. Garage, Drives, Basements, Walks: 4" minimum concrete thickness with 6x6, W1.4 x W1.4 WWF, with 3/4" minus clean granular fill from existing grade to bottom of slab (minimum 4" granular fill), provide 6 mil vapor barrier for interior concrete slabs.
- 2. Provide control joints at: a. 20'-0" o.c. for drives, garage, basements,patios, and porches, unless noted otherwise in drawings
- b. 4'-0" o.c. for walks Remove fins and projections; patch honeycombed areas at all exposed foundation walls.
- K. All beam pockets shall have 6" minimum bearing surface into foundation and shall receive (3) #4 rods
- vertically and #3 rods at top, bent around corner. L. Bottom of footings, piers and grade beams shall project 30" minimum below grade at all points where
- exposed to the exterior and project a minimum of 24" into solid soil. M. New basement walls as well as floors of habitable and occupied spaces are to be water-tight and properly
- reinforced to withstand water pressure as necessary. N. Any add mixtures used in concrete must conform to applicable local codes.
- O. All foundation walls are to be keyed to the footing.
- P. All concrete porch haunches are to receive min. 2 no. 4 bars, tied into foundation wall, min. 24".
- Q. Minimum of 2 no. 5 reinforcing bars around all window and door openings in concrete foundation and basement walls. Bars shall extend a min. of 24" beyond the corners of the openings.

04 - Masonry:

- A. Perform work in accordance with ACI-530.
- B. Comply with BIA Technical Note No. 1, latest edition, for construction during cold and hot weather
- C. For masonry veneer, provide corrosion resistant metal masonry ties minimum 22 GA. By 7/8" wide at 16" vertically and 16" horizontally and shall support no more than 2.67 s.f. of wall area. 1" minimum air space between brick and sheathing required. Brick veneer anchors around openings larger than 16" in either direction shall be spaced a max. of 36" o.c. around the perimeter of and within 12" of the
- opening. Brick veneer walls require weep holes of 3/16" diameter spaced less than 33" apart. D. Install weather-resistant sheathing paper (asphalt-saturated felt #14 per square otherwise known as
- type 1 felt, Tyvek, Typar, or other approved weather resistant material) shall be installed under certain types of siding and brick/stone veneer.

E. Install continuous 20 mil. membrane flashing at window sills, lintels, and top of foundations of veneer

- walls (Masonry Veneer). F. All door & window rough openings are to course with brick pattern vertically and horizontally. Full and
- ½ brick and stone are acceptable; partial bricks and stone are not acceptable. G. Masonry Material Selections:
- selection to be approved by Architect & Owner. Stone Veneer – Final selection to be approved by Architect & Owner.
- c. Flagstone Final selection to be approved by Architect & Owner. 1. Set flagstone in 1/2" bed of mortar
- 2. Flagstone to be installed on a 3.5" concrete reinforced slab, to slope 1/4" per 1'-0" for positive drainage away from residence.

a. Brick – Modular Size final selection to match existing in color, size, texture, and composition. Final

- d. Mortar Mortar for brick veneer walls to be Type "N" (General Purpose) in accordance with ASTM C 1329, ASTM C 270 and ASTM C 144. Composed of 1 part Type "N" mortar cement and 3-3/8 -4-1/2 parts sand to achieve a final minimum compressive strength 750 psi; with a compressive strength of 500 psi at 7 days.
- 1. At horizontal joints: Color selection to be approved by Architect & Owner. Joints to be concave, as approved by Architect & Owner.
- 2. At vertical joints: Mortar to be struck flush with the masonry face and to have a color to match the adjacent masonry. Concave profile or as approved by Architect & Owner.

05 - Metals:

- A. Corrosion-resistant flashing is required at the top and sides of all exterior window and door openings and at the intersection of chimneys or other masonry construction and frame walls. Exception: Not required where
- approved water-resistant sheathing and caulking is used at the top and sides so as to be leak proof. B. All structural steel shapes, tees, and plates shall satisfy the requirements of ASTM A36-87 Standard
- Specification for Structural Steel.
- C. All members shall have their surfaces prepared as follows:

4. Apply shop paint or rust - preventative coatings as specified.

- . Remove all visible oil and grease using solvent cleaners beforehand or power tool cleaning. 2. Remove all loose mill scale and rust using hand or power tool wire brushing. 3. Remove all dirt and dust by brushing or vacuum cleaning.
- D. All bolts shall be tightened to the snug tight condition. The snug tight condition exists when all connected parts are in tight contact. All bolts shall be Grade A. The Contractor shall be responsible for the proper tightening of all bolted connections
- E. All contact surfaces shall be free of scale (except tight mill scale), dirt, or other foreign material. Burrs that would prevent tight contact of the connected parts shall be removed. Paint is permitted on all contact surfaces.

Gutters and Downspouts:

or approved watercourse.

- A. All gutters and downspouts are to be sized and located by others, and be installed per "SMACNA"
- B. Profile of new gutters to match existing profile. Downspout locations indicated on plans or building elevations
- take precedence. C. Seal all joints to ensure water tightness and drain per code or as noted on floor plans and exterior elevations. D. Provide concrete splash block at the bottom of all down spouts discharged at grade. Discharge to storm sewer

Welding:

- A. Welding shall only be performed by welders qualified for the welding process and weld position. Welder qualification shall satisfy the requirements of the latest edition of ANSI/AWS D1.1A Structural Welding Code -
- Steel, Chapter 5, Qualification. All records of welder qualification shall be kept by the Contractor. **B.** Welding shall not be performed when the temperature of the material is lower than 0 degrees Fahrenheit or
- when weld surfaces are wet or exposed to rain, snow, or high wind velocities. C. The Contractor shall be responsible for the visual inspection of all welds. All deficiencies such as cracks, overlap or excessive convexity, craters, undersize, undercut, piping porosity, slag inclusion or incomplete fusion shall be repaired.

06 - Woood, Plastics and Composites

Polycarbonate Multiwall Roofing & Wall System:

<u>General:</u>

A. Install polycarbonate roof system components, fasteners and connectors from one manufacturer.

Storage & Protection:

- A. Protect roofing system from traffic and construction operations.
- B. Protect roofing system when used for subsequent work platform, materials storage, or staging.
- C. Remove projections capable of damaging roofing materials. D. Store sheets in dry, dark and well ventilated area with no exposure to sunlight, wind, dirt or sharp objects to
- prevent damage.
- E. Store sheets on a clean flat raised surface and on a soft material such as cardboard to prevent damage.
- F. Supported sloped stacking is recommended. If stacked flat, stack to a maximum height of 3 feet. G. Outdoors, sheets should be covered with an opaque maerial that provides protection from the sun to prevent
- the protective polyethylene film from baking onto the sheet. H. Touch up, repair or replace damaged products before substantial completion.

Preparation:

- A. Complete all the metalwork and painting before beginning sheet installation work.
- B. Check the dimensions on site, and plan the roofing requirements before ordering Polygal products for the
- C. Partially remove the protective film; fold back the printed sheet protection film 4" (inches) on each side. D. Attach Perforated Edge Tape to the upper and lower edges of the sheet.
- E. Use an Aluminum or Polycarbonate Edge Profiles to protect the lower edge of the sheets. For the upper edges protection also a Polycarbonate Edge Profiles can be used. F. Use a metal saw to cut the Aluminum Edge Profiles into pieces matching the width of sheets to which they will
- G. Drill drainage channels to allow for the flow of condensed water along the profiles used for the bottom section of
- the building's roof. Drill holes 6"- 12" apart using a 5/16" drill bit. H. Attach the edge profile to the sheet with the short side on top of the sheet.

<u>Installation:</u>

- A. Install the sheets with the ribs parallel to rain flow and with a slope of at least 10° (1:12 pitch). In wall and gable applications, always ensure that the ribs are positioned vertically.
- B. Place the sheets with the side protected by the printed film upwards. C. Slide the base connecting profile underneath the sheet flank and use self drilling screws to anchor them to the
- structure.
- D. Position the connecting profile cap in place. For a Polycarbonate Connection Profiles with a shock-absorbing support under the sheet, use a rubber mallet to connect it to the base. For Aluminum Glazing Systems, anchor the Cap Profile to the Base Profile with applicable screws (see Polygal Accessories Catalog). E. Manufacturer's non-woven tape system should be used for sealing the top and bottom edges of multiwall
- polycarbonate sheets to prevent mold, algea, dust and insects from accumulating in the multiwall sheets. After completing installation, remove all the protective film from the sheets as soon as possible.
- G. Place fixing screws with fixing gaskets only in the support frame lines. Do not over-tighten screws. H. Refer to manufacturer's specifications for span charts and applicable connection details:
- a. Sheet to sheet connection b. Upper edge wall connection
- c. Upper edge cladding connection d. Lower edge gutter connection
- e. Lower edge cladding connection

f. Ridge connection

<u>Cleaning:</u>

- A. Rinse sheet with water use warm soapy (mild dish soap) to clean sheets. If any dirt remains, remove with soft
- B. Do NOT use sponges, squeegees, brushes or sharp instruments as they may damage the UV protective

Cutting & Drilling:

- A. Rinse sheet with water use warm soapy (mild dish soap) to clean sheets. If any dirt remains, remove with soft
- B. Do NOT use sponges, squeegees, brushes or sharp instruments as they may damage the UV protective
- C. Cutting Multiwall sheets can be cut easily and accurately with standard woodworking equipment. This includes standard circular, jig, or table saw with a circular blade having 8-12 teeth per inch (fine toothed blade). Saw dust should be blown out (or) vacuumed out of the flutes. If using compressed air, insure that there is a moisture
- separator on the compressor to insure moisture is not introduced into the flutes. Thinner gauges can be cut with a box knife. It is important that the knife is sharp. D. Drilling - Holes can be drilled by a power drill using standard high speed steel twist drills or drills with an angular
- wedged bid. When drilling, support should be given immediately beneath the drill to avoid vibration. Very clean holes are easily obtained. The use of liquid cooling media is not recommended. E. Trimming – standard box cutting knife.

08 - Openings

Windows:

- A. Window material: Aluminum Clad Wood
- B. Type (DH, SH, casement, etc.) as per drawings and window schedule.
- C. Style: Match existing and per plans. D. Color: White exterior and black interior. Final selection to be approved by Owner and Architect.
- Muntin Pattern: As per drawings.

- F. Hardware: Color and material to be approved by Owner. G. Screens: Provide screens at all operable windows
- H. Window sizes: Per drawings and window schedule. Field verify existing openings prior to order.
- Jamb Depth: See drawings or as req'd by field conditions. Verify prior to window order. Frames: Thermally broken
- K. Glass: Low 'E' 2 glass with Argon .. Solar Heat Gain Coefficient (SHGC): Maximum 0.40
- M. U-Factor: Maximum 0.35 N. Safety Glazing: Tempered glass is to be used in all sliding glass doors, French doors, sidelites, windows within 24" of an exterior door, in all shower doors, within 18" of finished floor, and windows within 24" of a tub.
- O. Egress Windows: Min. 1 egress window required per bedroom. 5.7 S.F. net open area when opened. (5.0 S.F. for emergency egress windows at grade level rooms). Net clear opening shall be minimum 24" tall and minimum 20" wide, with a maximum sill height of 44" (to bottom of net clear opening).
- P. Install windows per manufacturer's recommendations. Q. Approved manufacturers: 'Kolbe' Ultra Series Double-Hung and 'Kolbe' Sterling Series at Casements or 'Weather Shield' Signature Series for all new windows. Final selection to be approved by Owner and Architect.

Doors:

- A. All glass in doors and sidelites shall be tempered glass. B. Door sizes: Per drawings and schedule. Field verify existing openings prior to order.
- C. Exterior Doors: 1. Style/Material: Pairs of 8-lite alum-clad doors with double-pane insulated glass (refer to plans for select doors
- with transoms and arched tops). Final selections to be approved by owner and architect. 2. Solar Heat Gain Coefficient (SHGC): Maximum 0.40
- 3. U-Factor: Maximum 0.35.
- 4. Color: White to match windows. Final selection to be approved by Owner and Architect. 5. All exterior doors shall be properly weather-stripped and provided with adjustable metal threshold. No "daylight" shall be showing where door contacts frame or adjacent door.
- D. Door Hardware: . Doors and frames shall be prepared to receive hardware.
- 2. Provide typical residential door hardware, including; thumb turn dead bolt locks at entry doors, privacy locks at bathrooms and bedrooms.
- 3. Exterior doors to receive weather resistant exterior grade locking hardware (verify specific hardware locking operation with Owner prior to boring door for hardware). 4. Owner to approve all final hardware selections.

- A. Owner to confer with contractor at outset of project to finalize cabinet selections, materials and countertop material.
- Provide allowance price for any missing built-in items. B. Final finish specifications to be approved by Owner & Architect.

- 1. All primers and paints to be low V.O.C. 2. Apply all coats of materials in strict accordance with manufacturer's current published specifications and
- instructions to provide a smooth surface, free of brush marks. 3. Paint and Stain approved equals (to match quality of paint specified): Brod-Dugan, Benjamin Moore, Porter,
- Pratt & Lambert, Sherwin Williams. 4. Apply paint and stain in accordance with manufacturer's instructions, free of surface defects. Clean all adjacent
- surfaces of splatters, etc. 5. Remove loose, scaling paint from all painted surfaces to remain. Putty and caulk as required to provide a
- smooth paintable surface. Paint removal methods shall be consistent with approved lead abatement procedures including wet scraping, HEPA sanding and proper disposal of hazardous waste materials. Follow with two coats exterior acrylic latex flat paint or oil base product approved by Owner.
- D. Typical Paint/Stain Schedule: Exterior Painted Aluminum & Steel a. One (1) coat Exterior Latex Primer (Benjamin Moore "Moorcraft Super Spec Latex Exterior Primer" or
 - approved equal) b. Two (2) coats Exterior Latex Medium Gloss Paint (Benjamin Moore "Moorcraft Super Spec Latex House & Trim Paint" or approved equal)

Stair rail, hand rail, and guard rail:

- A. The diameter width of the gripping surfaces of a handrail or grab bar shall be 1 1/4" to 1 1/2" or the shape shall provide an equivalent gripping surface. If handrails or grab bars are mounted adjacent to a wall, the space between the wall and the grab bar shall be 1 ½". Handrails may be located in a recess if the recess is a maximum of 3" deep and
- extends at least 18" above the top of the rail. B. The structural strength of grab bars, tub and shower seats, fasteners and mounting devices shall meet the following

1. Bending stress in a grab bar or seat induced by the maximum bending moments from the application of 250 lbf

- shall be less than the allowable stress for the material of the grab bar or seat. 2. Shear stress induced in a grab bar or seat by the application of 250 lbf shall be less than the allowable shear stress for the material of the grab bar or seat. If the connection between the grab bar or seat and its mounting bracket on other support is considered to be fully restrained, then direct and torsional shear stresses shall be total for the combined shear stress, which shall not exceed the allowable shear stress.
- 3. Shear force induced in a fastener of mounting device from the application of 250 lbf shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the 4. Tensile force induced in a fastener by a direct tension force of 250 lbf plus the maximum moment from the

application of 250 lbf shall be less than the allowable withdrawal load between the fastener and the supporting

C. Guard rails shall be designed to meet minimum lateral force code requirements. D. A handrail or grab bar and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements.

H. Stairs shall be designed for a 100 PSF live load or 300 lb. concentrated load on 4 sq. inches at mid span of a tread -

Edges shall have a min. radius of 1/8". E. Minimum clear width of stairway is 36". However, handrails may project maximum 4-1/2" into the required width. F. Handrails at "straight-run" stairs shall be continuous.

G. Handrails are required for all stairs (within the dwelling unit) with (3) or more risers.

- 16 Electrical:
- A. Work shall consist of all services typically known as "Design/Build" and shall include the furnishings of Construction Documents as required, materials, labor, equipment and tools to provide service as necessary by the new work for electric, power and lighting. Modify existing systems as required for the new work.
- Subcontractor shall be responsible for electrical permit. B. Provide complete electrical system as indicated on the contract documents for all portions of the renovation
- work. The design, layout, capacity and installation of the electrical system shall be the sole responsibility of the electrical contractor and shall incorporate all requirements shown in the contract documents. Changes to walls and ceilings to accommodate electrical work shall be approved by the Owner and Architect. C. Single or multiple-station U.L. listed smoke detectors shall be installed in the immediate vicinity of all
- bedrooms, in all bedrooms and in each story within a dwelling unit, including basements. Floor levels that do not contain bedrooms shall have the detector located at the ceiling near the stairway. Install smoke detectors in locations as shown on plans. Smoke detectors shall be U.L.-listed/BOCA approved, A.C. powered with battery backup and shall be interconnected so that an alarm will sound throughout the building. Smoke
- D. Lighting/Electrical in kitchen: Kitchen wall receptacles at countertops shall be supplied by at least 2 different circuits.
- Receptacles shall be installed so that no point along the counter is more than 24" from a receptacle. All refrigerators shall be provided with appropriate receptacles per manufacturer.
- Receptacles installed face-up in counter work-surface are prohibited. Lighting/Electrical in clothes closets:

detector installation shall comply with NFPA 72-93.

Surface-mounted incandescent fixtures: 12" min.

4. Panel boards shall be circuit breaker type "I.C."

- 1. The use of incandescent fixtures with open or only partially enclosed lamps and the use of pendant fixtures are prohibited. 2. Fixtures may be located only where there are the following minimum clearances to the nearest point of
- storage space. F. Lighting/Electrical in bathrooms: Lighting fixtures above bathtubs: Hanging fixtures, track lighting and ceiling fans shall not be installed
- within 3'-0" horizontally of a bathtub (measured from the outside edge of the tub) and 8'-0" vertically (from the top of the tub rim). Receptacles shall not be installed within a bathtub or shower space.
- G. Lighting/Electrical at stairways: Interior stairways shall be provided with a minimum of 10 foot-candles measured at every tread nosing. 2. All exterior stairways serving the dwelling shall have a minimum of 1 foot-candle measured on the tread
- 3. Interior stairways shall have illuminated lighting controls at each floor level.
- Surface-mounted fluorescent fixtures and recessed fixtures: 6" min. Recessed fixtures shall not be installed at insulated ceilings.
- H. Panel type(s), location and clearances: 1. Circuit breaker panels shall not be installed in bathrooms or clothes closets. Lighting is required in the
- vicinity of the electrical panel.
- 2. Electrical panels in new construction shall not be installed in areas with less than 6'-6" headroom. 3. A min. of 3'-0" clearance is required in front of electrical panels.
- Aluminum wiring may not be used. All materials shall be listed as approved by (U.L.) underwriter's laboratories J. All work shall be performed in accordance with the national electrical code and with all local codes, rules and
- K. Spec. grounding if underground pipe is used as required by NEC 250-83 and supplements as required in NEC 250-81 or 250-83.
- Receptacle outlets for ranges and clothes dryers must be a 3-pole with ground type. M. Electrical contractor shall provide all additional drawings (beyond Contract Documents) required for permit, permit applications, and permit fees.
- N. All exterior electrical outlets & all electrical outlets in garage, bathrooms, and adjacent to sinks shall be O. Electrical Fixtures are to be approved by Owner and installed by General Contractor unless otherwise noted. P. Electrical Contractor is to provide all necessary connections for power to new or relocated equipment

S. General Contractor shall mount boxes for all switch and outlet locations and verify final location with Owner

- indicated on drawings (i.e. dishwasher, refrigerator, oven, range, microwave, disposals, etc.). Verify final equipment requirements with Owner. Q. Accurately label all circuits at panel. R. All switches, outlets, cable, telephone, and computer cover plates shall be color approved by Owner.
- prior to wiring. All lights and other fixtures shall be approved by Owner prior to installation. T. Contractor is responsible for supplying proper power requirements to all electrical appliances in project. U. Contractor is responsible for removing and relocating any wires in the path of construction. Consult with

Owner concerning new location for power lines entering house if necessary.

- 31 Site Work: A. General Contractor is to slope finish grade away from foundation a minimum of ½" per foot for a minimum distance of 10-0" from foundation or to swale. Finish grading shall leave all yards smooth (repair all eroded
- areas, ruts, etc.). Prep disturbed turf areas to receive seeding, sod, plantings, bedding, walks, drives, etc. General Contractor shall supply and install final site finishes. B. General Contractor is responsible for the control of erosion and the prevention of discharge onto adjacent
- C. Gas pipe (if applicable) is to enter house above grade and is to be encased in non-corrosive, protective D. Excavating Subcontractor is to contact electric, water, sewer and gas companies to verify location of utilities
- E. Footings are designed on the basis of an assumed allowable soil bearing pressures of 2,000 p.s.f. Extend footings down below bearing elevations indicated, as required, to reach soil that provides adequate bearing

1. Paved areas: 90% of maximum density at optimum moisture content

Utility trenches: 90% of maximum density at optimum moisture content

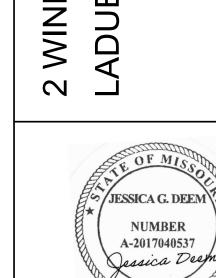
G. Finished grades at building are to be minimum 8" below top of concrete foundation wall.

3. Buildings, Slabs, Structures: 95% of maximum density at optimum moisture content

prior to commencing any excavation work.

Bottom of piers to bear at 30" min. below grade.

H. Compacting shall be performed according to following schedule:



MO# 2017040537 **REVISIONS:** Description Date

Jessica G. Deem

ISSUE DATE:

SPECIFICATIONS

ACTUAL SHEET SIZE: 24" X 36"

4/7/2022

1" ACTUAL

Architecture + Design

3407 S. Jefferson Ave.

Saint Louis, MO 63118

ST. PETERS, MO 63376

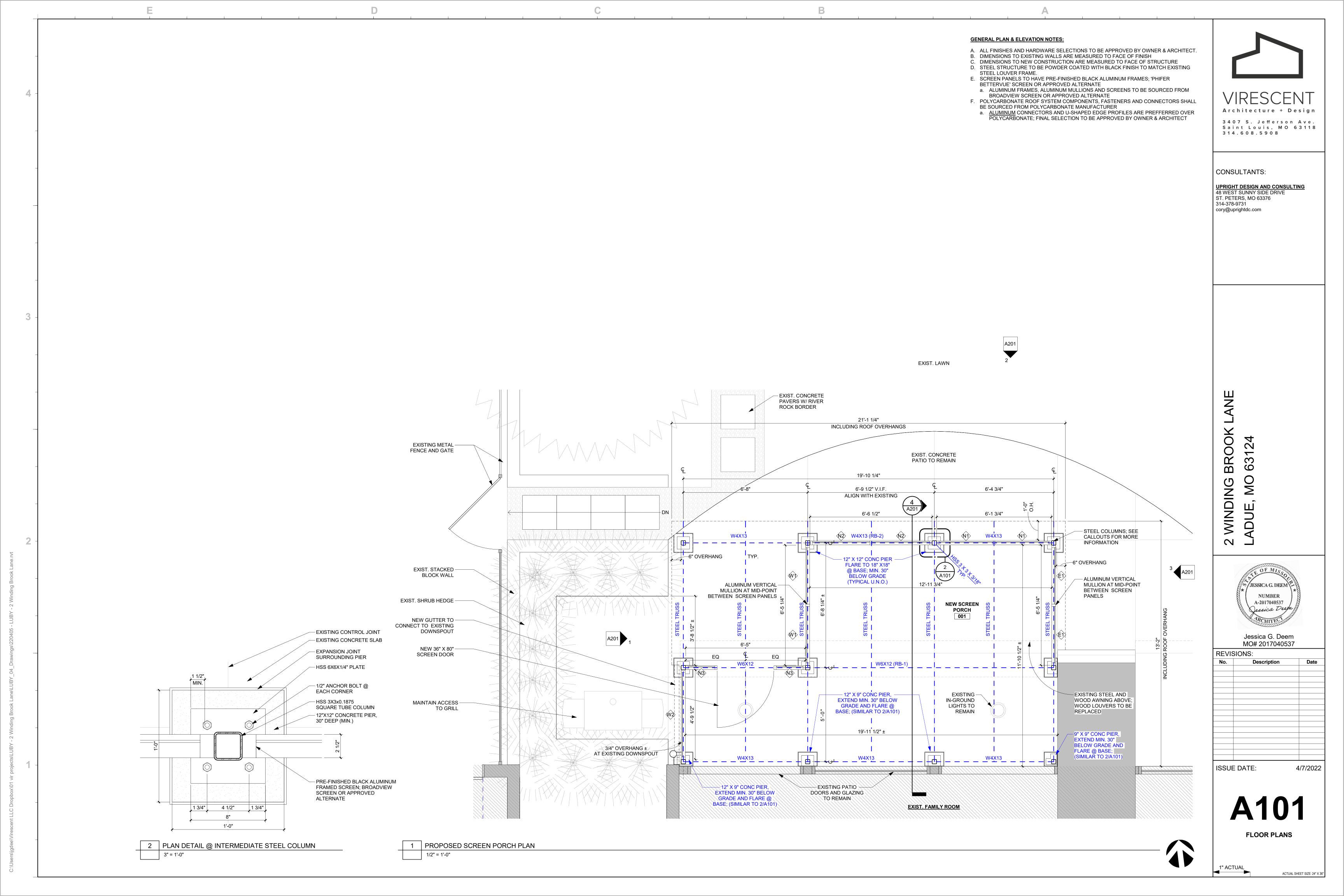
cory@uprightdc.com

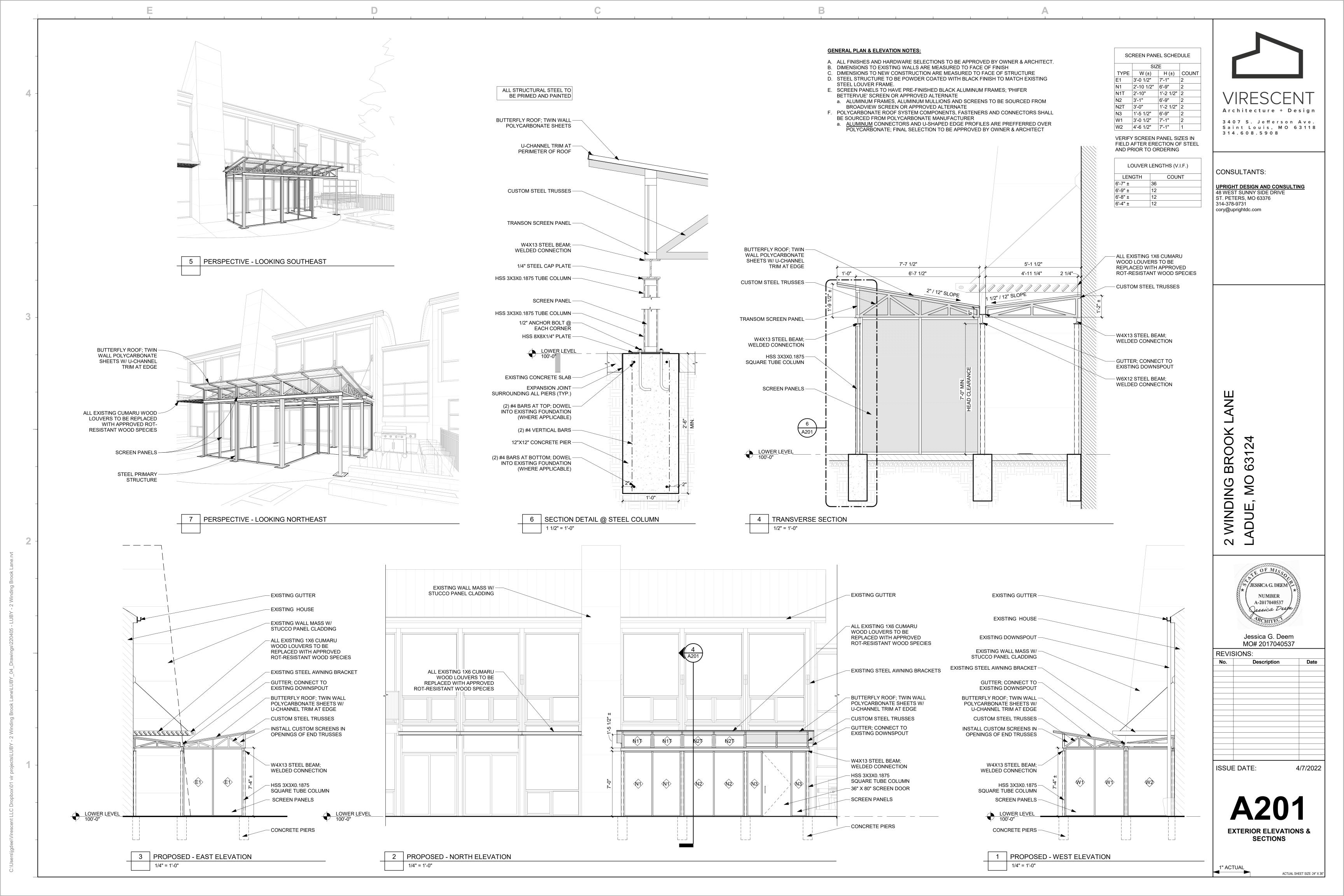
314-378-9731

314.608.5908

CONSULTANTS: UPRIGHT DESIGN AND CONSULTING 48 WEST SUNNY SIDE DRIVE

> 0 \mathcal{C} Ø W DING







REAR FACADE (LOOKING NORTHEAST)



VIEW OF BACK YARD FROM LOWER LEVEL



REAR FACADE (LOOKING EAST)



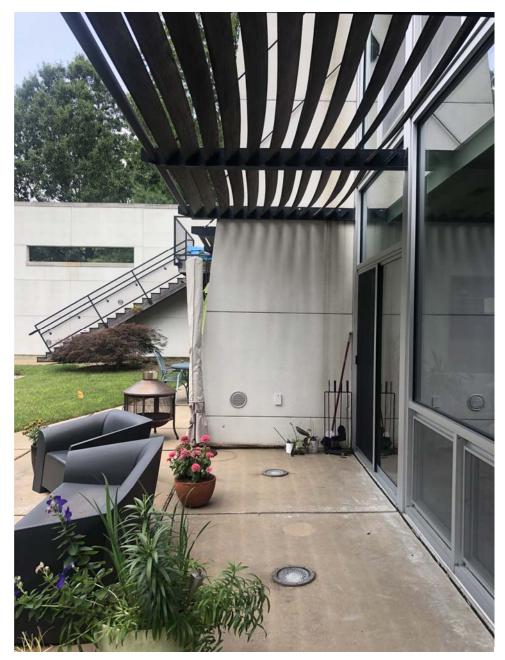
FRONT FACADE (LOOKING WEST)



REAR FACADE (LOOKING EAST)



REAR FACADE (LOOKING NORTHEAST)



REAR FACADE AT LOCATION OF FUTURE PORCH (LOOKING NORTH)



REAR FACADE AT LOCATION OF FUTURE PORCH (LOOKING SOUTH)



BACK YARD VIEW FROM ASPHALT DRIVE (LOOKING NORTH)



REAR FACADE AT LOCATION OF PROPOSED PORCH (LOOKING EAST)



BACKYARD VIEW (LOOKING NORTHWEST)



BACKYARD VIEW (LOOKING SOUTH)